Elements of a QAPP – Optional Form

Quality Assurance Project Plans (Use of this form is optional)

Part A – Project Management (Elements 1 - 9)

1) Title and Approval Page

Project title:

Date of the QAPP:

Names of organizations involved in the project:

Project Manager Signature: _____

Name / Date: _____

Project QA Officer Signature: _____

Name / Date: _____

Virginia DCR QA Officer Signature: _____

Name / Date: _____

USEPA Project Manager Signature: _____

Name / Date: _____

2) Table of Contents

List sections with page numbers, figures, tables, references, and appendices (attach pages).

3) Distribution List

List the individuals and organizations that will receive a copy of your approved QAPP. Include representatives of all groups involved in your monitoring effort. Include phone numbers.

A.

B.

C.

D.

E.

F.

G.

4) Project / Task Organization

List key project personnel and their corresponding responsibilities.

Name	Title / Responsibility
	Project Manager
	Advisory Panel (contact person)
	QA Officer
	Field Leader
	Laboratory Leader
	Data Processing Leader

5) Problem Identification / Background

A. Problem Statement:

B. Intended Use of Data:

6) Project / Task Description

A. In general, describe the work to be performed and where it will take place.

B. Identify what kinds of samples will be taken, what kinds of conditions they will measure, which are critical, and which are of secondary importance.

C. Indicate how you will evaluate your results (how you will be making sense out of what you find)..

D. *Project Timetable*

Major Task Category	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**

7) Data Quality Objectives for Measurement Data

A. Data Precision, Accuracy, Measurement Range:

Parameter	Precision	Accuracy	Measurement Range
	+/- %	+/-	to units
	+/- %	+/- mg / L	to mg / l
	+/- %	+/- mg / L	to mg / l
	+/- %	+/- mg / L	to mg / l
	+/- %	+/- mg / L	to mg / l

B. Representativeness*:*

C. Comparability*:*

D. Completeness*:*

Parameter	No. Valid Samples Anticipated	No. Valid Samples Collected & Analyzed	Percent Complete

8) Training Requirements / Certification

Types of Volunteer Training	Frequency of Training	Frequency of Certification

Description of Training and Trainer Qualifications:

9) **Documentation and Records**

Part B - Measurement / Data Acquisition (Elements 10 – 19)

10) Sampling Process Design

Outline the experimental design of the project including information on types of samples required, sampling frequency, sampling period (e.g., season), and how you will select sample sites and identify them over time.

Sample Design Logistics

	Parameter	No. of Samples	Sampling Frequency	Sample Period
Biological				
Physical				
Chemical				

11) Sampling Methods Requirements

Describe your sampling methods

Example: Sample Methods Requirements

Matrix	Parameter	Sampling Equipment	Sample Holding Containers	Method Sample Preservative	Maximum Holding Time
Water	Ph	Jones ph color comparator kit	Screw top, glass sample bottles	None	Immediately
Water	Temperature	Smith armored thermometer	None, measurement taken instream	None	Immediately
Water	Turbidity	Jones turbidity meter	Screw top, glass sample bottles	Store on ice	48 hours
Substrate	Macro-invertebrates	3'x3' kicknet; 500 micron mesh	1 liter plastic wide-mouth bottle	90% ethyl alcohol	6 weeks

12) Sample Handling and Custody Requirements

Describe the procedures used to keep track of samples that will be delivered or shipped to a laboratory for analysis.

13) Analytical Methods Requirements

List the analytical methods and equipment needed for the analysis of each parameter, either in the field or the lab.

14) Quality Control Requirements

List the number and types of field and laboratory quality control samples that will be taken.

A. Field QC Checks:

B. Laboratory QC Checks:

C. Data Analysis QC Checks:

D. Biological Sample QC Checks:

15) Instrument / Equipment Testing, Inspection, and Maintenance Requirements

Describe your plan for routine inspection and preventive maintenance of field and lab equipment and facilities.

Equipment Type	Inspection Frequency	Type of Inspection

16) Instrument Calibration and Frequency

Identify how you will calibrate sampling and analytical instruments.

Equipment Type	Calibration Frequency	Standard or Calibration Instrument Used

17) Inspection / Acceptance Requirements for Supplies

Describe how you determine if supplies such as sample bottles, nets, and reagents are adequate for your program's needs

18) Data Acquisition Requirements

Identify any types of data your project uses that are not obtained through your monitoring activities.

19) Data Management

Trace the path of data management, from field collection and lab analysis to data storage and use.

Part C - Assessment and Oversight (elements 20-21)

20) Assessments and Response Actions

Discuss how you evaluate field, lab, and data management activities, organizations(such as contract labs) and individuals in the course of your project.

A. Field Evaluation & Assessment:

B. Laboratory Evaluation & Assessment:

C. Data Management Evaluation & Assessment:

21) Reports

Identify the frequency, content, and distribution of reports to data users, sponsors, and partnership organizations that detail project status, results of internal assessments and audits, and how QA problems have been resolved.

Part D - Data Validation and Usability (elements 22-24)

22) Data Review, Validation and Verification Requirements

State how you review data and make decisions regarding accepting, rejecting, or qualifying the data. All that is needed here is a brief statement of what will be done, by whom.

23) Validation and Verification Methods

Describe the procedures you use to validate and verify data.

24) Reconciliation with Data Quality Objectives

Once the data results are compiled, describe the process for determining whether the data meet project objectives.